Before the
Federal Communications Commission
Washington, D.C. 20554

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| In the Matter of | ) | |
| | ) | |
| Joint Application by BellSouth Corporation, | ) | CC Docket No. 02-150 |
| BellSouth Telecommunications, Inc. | ) | |
| and BellSouth Long Distance, Inc., for | ) | |
| Provision of In-Region, InterLATA | ) | |
| Services in Alabama, Kentucky, Mississippi, | ) | |
| North Carolina, and South Carolina | ) | |
| | ) | |

**REPLY DECLARATION OF DR. CHRIS FRENTRUP**
**ON BEHALF OF WORLDCOM, INC.**

Based on my personal knowledge and on information learned in the course of my duties, I, Chris Frentrup, declare as follows:

## I. INTRODUCTION AND SUMMARY

1. I am the same Dr. Chris Frentrup who previously filed a declaration in this proceeding.

2. The purpose of my Reply Declaration is to provide further information regarding several of the issues raised in my initial declaration in this proceeding. First, I further explain how the Commission and the states have erred by allowing BellSouth to use different technologies to model loop costs, depending on the intended use of the loop. This approach means that the cost model overstates the cost of each type of loop, resulting in excessive loop rates. Second, I submit testimony filed by WorldCom in the state proceedings that shows that the unsupported and excessive "in-plant" factors and "loading" factors used in all five states to determine the cost of engineering, furnishing and installing plant overstates costs by at least 15 percent. Third, I provide testimony filed by WorldCom in Kentucky that shows that BellSouth's

rates for Optional Daily Usage Files ("ODUF") and Access Daily Usage Files ("ADUF") charges double recover BellSouth's costs because the costs included in these rates have not been removed from its shared and common costs recovered in its other UNE rates. Finally, I provide an estimate of the effect on loop rates in South Carolina of deaveraging the zone rates based on cost rather than on the retail rates zones. This change lowers loop rates in zones 1 and 2, and raises the rate in zone 3, which ties the rates more closely to cost differences among the wire centers.

## II. USE OF DIFFERENT MODELING SCENARIOS OVERSTATES LOOP COSTS

9. As I noted in my initial declaration, BellSouth improperly uses multiple scenarios with different mixes of IDLC and UDLC to compute different rate elements. For example, BellSouth runs its loop model using all UDLC for stand-alone loops, while using a mix of UDLC and IDLC for UNE platform loops. In addition, BellSouth performs runs of its models with no DLC of any kind to price asymmetric digital subscriber loops ("ADSL").

10. By failing to use the most forward-looking technology in all cases, this method does not follow the TELRIC requirement that the least cost, most efficient network be modeled. Modeling different networks for different purposes results in loss of the economies of scope that occur in a multi-use network. The FCC's conclusion that this is not so, Georgia/Louisiana Order ¶ 41, fails to take into account the diseconomies from designing networks for customer demand that could not be served efficiently using that particular network design.

11. Loop plant can be provided over different technologies – fiber feeder with digital loop carrier (either IDLC or UDLC) or copper feeder. In any network, a mix of these technologies will be used, depending on their relative cost. By allowing BellSouth to model all loops using the same technology for their different scenarios, the state commissions guaranteed

that many loops in each scenario would be built using something other than the least cost, most efficient technology. Making that error guarantees that the average loop cost computed in each scenario will be higher than the average cost of a loop that was computed using the most efficient technology.[1]

12. The Commission accepted the use of this methodology in the Georgia/Louisiana Order, on the grounds that the methodology included all lines in each scenario, and thereby captured economies of scope.[2] However, this reasoning misses the point. Precisely because each scenario includes all lines, each necessarily overstates the average costs for lines provided using that technology. Both the state commissions and this Commission have misunderstood this important point, and have thereby incorrectly approved a methodology that does not model the least cost, most efficient network.

## III. BELLSOUTH'S "LOADING" FACTORS OVERSTATE MATERIAL INVESTMENT AND THUS COSTS

13. In my initial declaration, I noted that BellSouth's "in-plant" factors and "loading" factors overstate material investment, because these factors functioned as closure factors to bring the material investments determined by BellSouth cost models in line with BellSouth's embedded book investment. With this Reply Declaration, I am submitting exhibits from AT&T and WorldCom testimony filed in pending Florida and Georgia UNE cases that itemizes the

[1] In my initial declaration, I used the example of an all copper network being used to serve loops of over 12,000 feet, which can be more efficiently served using fiber and remote terminals.
[2] Georgia/Louisiana Order ¶ 41.

effect of correcting these and other factors.[3] These itemizations show that the loading factors employed by BellSouth cause forward-looking costs to be overstated by at least 15%.

14. In both cases, the exhibits display the effect on BellSouth's computed loop costs from making several changes proposed by WorldCom. In the exhibit from Florida, the changes are "Correct DLC In-Plant Factors" (line 3 of the exhibit, a 7.4% reduction), "Eliminate 25% Closing Factor and Correct Contract Labor Data" (line 5, a 4.1% reduction), "Update Inflation Factors" (line 9, a 4.1% reduction), "Correct Treatment for Exempt Material" (line 10, a 7.0% reduction), and "Correct Engineering Factors" (line 11, a 5.0% reduction), for a total 24.8% reduction. Similarly, in the Georgia exhibit the changes are "Inflation Double Count" (line 5), "Closing Factor" (line 12), "Exempt Material Loading" (line 19), "Indirect Labor Loading" (line 20), "Engineering Factors" (line 21), and "Bottoms-Up DLC Inputs" (line 22), for a total combined reduction in the Zone 1 2-Wire Analog Voice Grade Loop cost of 15 percent.[4]

## IV. BILLING AND INFORMATION COSTS HAVE NOT BEEN REMOVED FROM SHARED AND COMMON COSTS IN UNE RATES

15. In my initial declaration I noted that DUF charges were substantially higher in South Carolina and Alabama than in the other states included in this application, even though the Operations Support Systems ("OSS") used to provide these services are regional, according to BellSouth. BellSouth has recently reduced its DUF rates in those states in its statement of generally applicable terms ("SGAT"). Assuming that WorldCom will be able to incorporate

[3] See Attachment 1. This testimony was originally filed as Georgia PSC Docket 14361-U revised exhibit JCD-BFP-Q, 4/30/02 and Florida PSC Docket No. 990649A, Late Filed Hearing Exhibit 70, filed June 7, 2002.

[4] The South Carolina commission did not reduce BellSouth's loop costs explicitly for these overstated loading factors, but did apply a 20 percent "competitive discount" to BellSouth's recurring costs and a 50 percent "competitive discount" to BellSouth's non-recurring costs.

these lowered DUF charges in its interconnection agreements as well, WorldCom acknowledges that the rates in all the states included in this application have roughly equivalent DUF rates.

16. However, BellSouth already recovers Billing Information Costs as part of its shared and common costs. At the request of Commission staff, I am submitting a copy of WorldCom's testimony in Kentucky that addresses this issue. This testimony demonstrates that BellSouth has not removed these costs before developing its shared and common costs. Thus, the DUF charges double recover costs that are already recovered in UNE rates and should be eliminated. See Attachment 2.

## V. SOUTH CAROLINA RATES ARE NOT DEAVERAGED BASED ON COST

17. The South Carolina rates were deaveraged based on South Carolina's retail local rate zones, rather than on any cost-based criteria. For example, the Eastover wire center (EOVRSCMA), which serves a relatively high cost suburb of Columbia, is assigned to retail rate Zone 1, while the relatively low cost wire center that serves Clemson (CLSNSCMA) is assigned to retail rate Zone 2, and the medium cost wire center that serves Clinton (CLTNSCMA) is assigned to retail rate Zone 3.

18. The other states included in this application all assigned wire centers to zones based on the relationship of the wire center costs to the statewide average. For example, Alabama assigned all wire centers with costs below the state average to Zone 1, all wire centers with costs above that level but less than 150 percent of the state average to Zone 2, and all zones with higher costs to Zone 3. The rate in each zone is then set to the weighted average of the costs in the wire centers assigned to each zone.

19. Applying this methodology for assigning wire centers to rate zones to the data in South Carolina lowers the rate in zones 1 and 2 by $.89 and $.19, respectively, and raises the rate

in zone 3 by $4.03. At the same time, it assigns more lines to zone 2 and fewer to zones 1 and 3. The revised rate charged in each wire center, as well as the revised assignment of the wire centers to the rate zones that results from using this methodology, is displayed in confidential Attachment 3.[5]

## VI. CONCLUSION

20. The problems with the BellSouth cost models and the inputs indicate that the resulting UNE rates are clearly not cost-based. Unless BellSouth corrects its UNE rates to adjust for these problems, the Commission should reject BellSouth's section 271 application.

21. This concludes my Reply Declaration on behalf of WorldCom.

I declare under penalty of perjury that the foregoing is true and correct. Executed on August 5, 2002.

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Dr. Chris Frentrup

[5] The analysis presented in Attachment 3 uses line counts from BellSouth's loop cost model. If the line counts from the Commission's Synthesis Model are used instead, zone 1 loop rates would be $1.30 less and zone 2 rates would be $0.96 less than the rates set by the South Carolina commission, while Zone 3 rates would be $3.57 higher.

# ATTACHMENT 1

# ATTACHMENT 2

# ATTACHMENT 3

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